

PRG



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,528	05/31/2001	Shou-Chung Chen	148693.00369	1354
7590 11/17/2004 THOMAS T. MOGA, ESQ. DICKINSON WRIGHT PLLC 1901 L STREET, N. W., SUITE 800 WASHINGTON, DC 20036			EXAMINER KOSOWSKI, ALEXANDER J	
			ART UNIT 2125	PAPER NUMBER

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,528

Applicant(s)

CHEN ET AL.

Examiner

Alexander J Kosowski

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 6
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

- 1) Claims 1-9 are presented for examination.

Specification

- 2) The disclosure is objected to because of the following informalities:

The disclosure contains a plurality of grammatical errors and appears to be a translation of a foreign document. The following is a small list of page and line numbers where errors exist. However, this list is not exhaustive. Applicant is advised to make any other changes necessary to the specification in order to fix all grammatical errors.

Page 1, lines 23-25, "rapidly reply the customer quantity".

Page 5, lines 21-23, "capacities 80 percent".

Page 6, lines 17-19, "While, the unselected process".

Page 8, line 10, "by the way as same".

Appropriate correction is required.

Claim Objections

- 3) Claims 3, 4-5 and 7-9 are objected to because of the following informalities:

Referring to claim 3, line 2, the word "principleto" needs corrected spacing.

Referring to claim 4, lines 4-5, the phrase "according to the equation of wherein" does not make grammatical sense.

Referring to claim 4, line 3, the phrase "calculating difference rate" should read -- calculating a difference rate--.

Referring to claim 5, line 11, the phrase "process group not less than" should read -- process group is not less than--.

Art Unit: 2125

Referring to claim 5, line 12, the phrase "processes to define each" should read -- processes, defining each--.

Referring to claim 7, line 2, the phrase "according to following" should read --according to the following--.

Referring to claim 7, lines 4-5, the phrase "according to the equation of wherein" does not make grammatical sense.

Referring to claim 7, line 3, the phrase "calculating difference rate" should read -- calculating a difference rate--.

Referring to claim 8, line 6, the phrase "production capacities not less" should read -- production capacities is not less--.

Referring to claim 8, line 9, the phrase "period not less" should read --period is not less--.

Referring to claim 8, line 10, the phrase "processes to define each" should read -- processes, defining each--.

Referring to claim 9, line 2, the phrase "according to following" should read --according to the following--.

Referring to claim 9, line 3, the phrase "calculating difference rate" should read -- calculating a difference rate--.

Appropriate correction is required.

4) Claims 4, 7 and 9 are objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In addition, all earlier claim objections, as well as 112 and 101 rejections on these claims must also be overcome.

Claim Rejections - 35 USC § 112

- 5) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6) Claims 1, 4-5, 7 and 8-9 are rejected under 35 U.S.C. 112.

Claim 1 recites the limitation "said unselected processes" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "said minimum difference rate " in line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "said process I and said process j " in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "said unselected processes" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "said process I and said process j " in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "said minimum difference rate " in line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "said unselected processes" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "said process I and said process j" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "said minimum difference rate" in line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

7) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8) Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

(A) For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example), and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the process must somehow apply, involve, use, or advance the technological arts.

In the present case, claim 1 only recites an abstract idea. The recited steps for planning product groups do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to group processes together.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces a grouping of

Art Unit: 2125

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter.

(B) Similar analysis can be applied to independent claims 5 and 8. Therefore those claims are rejected for the same reasons as claim 1.

(C) Claims 2-4, 6-7 and 9 inherit the above deficiencies through dependency, and are thus rejected for the same reasons provided for claims 1, 5 and 8, and incorporated herein.

Claim Rejections - 35 USC § 103

9) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10) Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narimatsu et al (U.S. Pat 5,826,236), further in view of Kennedy (U.S. Pat 6,188,989).

Referring to claim 1, Narimatsu teaches a method comprising providing a process group including a plurality of processes (col. 12 lines 55-65), sorting said processes according to their respective production capacity (col. 12 line 55 through col. 13 line 15); and selecting certain processes based on certain attributes (col. 13 lines 10-23). However, Narimatsu does not explicitly teach selecting said processes whose sum of their respective production capacities in

Art Unit: 2125

proportion to the total production capacity of said process group is not less than a predetermined ratio; according to said selected processes to define each of said selected processes as a product group; and incorporating said unselected processes of said process group into said product groups according to process resemblance.

Kennedy teaches an available to promised (ATP) method whereby production capacity is a factor used for scheduling forecasted orders (col. 2 lines 46-60) and whereby a product group model is utilized to aggregate based on similar attributes (col. 7 lines 33-54).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to select processes based on a ratio of production capacity and define product groups according to attributes in the method taught by Narimatsu since an ATP system of this type would allow manufacturers to better meet customer demand (Kennedy, col. 2 lines 16-23) and since this is a way of improving promise and fulfillment in manufacturing facilities that have limited capacity (Kennedy, col. 1 lines 37-44).

Referring to claim 2, Narimatsu teaches the above. However, Narimatsu does not explicitly teach defining said process with said production capacity within a certain period not less than a predetermined value as a product group.

Kennedy teaches an available to promised (ATP) method whereby production capacity is a factor used for scheduling forecasted orders (col. 2 lines 46-60) and whereby a product group model is utilized to aggregate based on similar attributes (col. 7 lines 33-54).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to define said process with said production capacity within a certain period not less than a predetermined value as a product group in the method taught by Narimatsu since an ATP

Art Unit: 2125

system of this type would allow manufacturers to better meet customer demand (Kennedy, col. 2 lines 16-23) and since this is a way of improving promise and fulfillment in manufacturing facilities that have limited capacity (Kennedy, col. 1 lines 37-44).

Referring to claim 5, Narimatsu teaches a method comprising providing a process group including a plurality of processes (col. 12 lines 55-65), sorting said processes according to their respective production capacity (col. 12 line 55 through col. 13 line 15), and selecting certain processes based on certain attributes (col. 13 lines 10-23). However, Narimatsu does not explicitly teach setting a first predetermined ratio and a second predetermined ratio of the total production capacity of said process group, said first predetermined ratio larger than said second predetermined ratio, and the sum of both equal to 1; selecting said processes whose sum of their respective production capacities in proportion to the total production capacity of said process group not less than said first predetermined ratio; according to said selected processes to define each of said selected processes as a product group; and incorporating said unselected processes of said process group into said product groups according to process resemblance.

Kennedy teaches an available to promised (ATP) method whereby production capacity is a factor used for scheduling forecasted orders (col. 2 lines 46-60) and whereby a product group model is utilized to aggregate based on similar attributes (col. 7 lines 33-54).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to select processes based on a ratio of production capacity and define product groups according to attributes in the method taught by Narimatsu since an ATP system of this type would allow manufacturers to better meet customer demand (Kennedy, col. 2 lines 16-23) and

Art Unit: 2125

since this is a way of improving promise and fulfillment in manufacturing facilities that have limited capacity (Kennedy, col. 1 lines 37-44).

Referring to claim 6, see rejection of claim 2 above.

11) Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narimatsu, further in view of Kennedy, further in view of Hoste (U.S. Pat 5,327,349).

Referring to claim 3, Narimatsu and Hoste teach the method above. However, they do not explicitly teach that said predetermined ratio is determined according to the 80/20 principle to select said processes whose sum of their respective production capacities is not less than eighty percent of the total production capacity of said process group.

Hoste teaches the use of the 80/20 principle in a manufacturing system (col. 1 lines 29-49).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize the 80/20 principle to select processes in the invention taught by Narimatsu and Kennedy above since the 80/20 principle is useful for establishing priorities, for showing which causes contribute most of the problems, and for showing the most significant opportunities for improvement which will yield the greatest return if rectified (Hoste, col. 1 lines 38-44).

Referring to claim 8, Narimatsu teaches a method comprising providing a process group including a plurality of processes (col. 12 lines 55-65); sorting said processes according to their respective production capacity (col. 12 line 55 through col. 13 line 15), and selecting certain processes based on certain attributes (col. 13 lines 10-23). However, Narimatsu does not explicitly teach according to the 80/20 principle, selecting said processes whose sum of their

Art Unit: 2125

respective production capacities not less than eighty percent of the total production capacity of said process group, and selecting said process whose said respective production capacity within a certain period not less than a predetermined value; according to said selected processes to define each of said selected processes as a product group; and incorporating said unselected processes of said process group into said product groups according to process resemblance.

Kennedy teaches an available to promised (ATP) method whereby production capacity is a factor used for scheduling forecasted orders (col. 2 lines 46-60) and whereby a product group model is utilized to aggregate based on similar attributes (col. 7 lines 33-54).

Hoste teaches the use of the 80/20 principle in a manufacturing system (col. 1 lines 29-49).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to select processes based on a ratio of production capacity and define product groups according to attributes in the method taught by Narimatsu since an ATP system of this type would allow manufacturers to better meet customer demand (Kennedy, col. 2 lines 16-23) and since this is a way of improving promise and fulfillment in manufacturing facilities that have limited capacity (Kennedy, col. 1 lines 37-44).

Therefore, it would also have been obvious to one skilled in the art at the time the invention was made to utilize the 80/20 principle to select processes in the invention taught by Narimatsu and Kennedy above since the 80/20 principle is useful for establishing priorities, for showing which causes contribute most of the problems, and for showing the most significant opportunities for improvement which will yield the greatest return if rectified (Hoste, col. 1 lines 38-44).

Art Unit: 2125

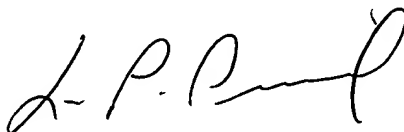
Conclusion

12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 571-272-3744. The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. In addition, the examiner's RightFAX number is 703-746-8370.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Alexander J. Kosowski
Patent Examiner
Art Unit 2125

A handwritten signature in black ink, appearing to read 'L. P. Picard', with a stylized flourish at the end.

**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**